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EXAMINER

MARCANTONI, PAUL D

ART UNIT

PAPER NUMBER

1755

DATE MAILED: 04/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/090,334	Applicant(s) NAJI ET AL.	
	Examiner Paul Marcantoni	Art Unit 1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

The examiner's indication of allowable subject matter has been withdrawn upon reconsideration of prior art that reads upon the instantly claimed invention as well as issues regarding 35 USC 112 that should be made of record. Applicants' amendment of 2/17/04 is acknowledged but claims 15-17 are no longer allowable.

New Matter:

Claims 15-17 are rejected under the first paragraph of 35 USC 112 and 35 USC 132 as the specification as originally filed does not provide support for the invention as is now claimed.

Claim 15 contains the limitation that the fly ash (water reducer) component is as follows: "fly ash having a predominant particle size of up to about 10 microns". This represents the *smaller size fraction* of fly ash particles (See page 4, third paragraph and also see Table 1 on page 8, Table 2 on page 10, Table 3 on page 11, and Table 4 on page 12). Yet, the applicants do not have support for a cement slurry composition comprising this smaller size fraction of fly ash particles *without the water reducer*. In other words, applicants are using this negative limitation to show that a conventional water reducer is not necessary. The claim with these limitations represents new matter.

The following points should be made:

1) Applicants are first referred to Table 1. There is no support for a fly ash mixture except a "large size fraction" in Mix 1 which does not have a conventional water reducer or sulphonated naphthalene formaldehyde. The "small size fraction" all require the addition of 3 gm of the conventional water reducer.

2) Applicants are next referred to Table 2. It can also be seen that both Mix 1 and Mix 2 all require the addition of a conventional water reducer Melment 15 or sulphonated melamine formaldehyde. There is no support from this Table for a mixture of small size fraction without a conventional water reducer.

3) Applicants are next referred to Table 3. Again, both mixtures for fly ash require the addition of the conventional water reducer sulphonated naphthalene formaldehyde. There is no support from this Table for a mixture of small size fraction without a conventional water reducer.

4) Applicants are finally referred to Table 4. Both Mix 1 and Mix 2 require the conventional water reducer naphthalene formaldehyde sulphonate. Mixes 1 and 2 contain both large size and small size fraction fly ash. More so, Mix 2 even contains the addition of hydrated alumina yet this mixture still adds a conventional water reducer. It should be thus apparent that applicants do not have support for the limitation of fly ash having a predominant particle size of up to 10 microns or "the small scale fraction" and the negative limitation without a conventional water reducer. All small scale fraction mixes as well as all aluminous material (e.g. hydrated alumina) mixes require the addition of a conventional water reducer.

5) It is also noted that the terms "substantially identical in composition to the formulation of the cementitious slurry" would not appear to be supported by the original disclosure and thus new matter. It has already been stated that applicants do not have support for the limitation "without the water reducer".

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DISCLOSURE NOT UNDERSTOOD

The disclosure is objected to under 37 CFR 1.71, as being so incomprehensible as to preclude a reasonable search of the prior art by the examiner. Note that a search was made however in attempt to figure out what applicants meant by the unknown terms. For example, the following items are not understood: The specification is objected to because the applicants do not define what they mean by "*larger size fly ash particles*" or "*large size fraction fly ash*" (see Tables 1-4 and page 4, lines 16-17). Applicants do define fly ash particles are typically spherical and range in diameter from about 1 to 100 microns. However, while this may be so, that does not necessarily mean that defines what applicants actually mean by "large size fraction fly ash". It is possible that fly ash can be larger than 100 microns. It is the examiner's position that should applicants amend their claim to greater than 10 to 100 microns or greater than 10 microns that this will be held to be new matter. There is no literal support for a large size fly ash fraction of this range. Nevertheless, applicant is required to submit an amendment which clarifies the disclosure so that the examiner may make a proper comparison of the invention with the prior art.

Applicant should be careful not to introduce any new matter into the disclosure (i.e., matter which is not supported by the disclosure as originally filed).

Enablement and Written Description:

Claims 15-17 are rejected under the first paragraph of 35 USC 112 as the specification is not enabled for the invention as is now claimed and there is no literal

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written description allowing for applicants claiming a cement slurry composition comprising fly ash having a predominant particle size of up to 10 microns (small size fraction fly ash) or aluminous material "without the addition of a conventional water reducer". As stated above, Tables 1 through 4 all require the presence of a conventional water reducer in the fly ash mixtures. The only one mixture that supports "without a conventional water reducer" is Mix 1 in Table 1. However, this is not for the small size fraction fly ash with particles predominantly below 10 microns. There is only support for the omission of a conventional water reducer for the "large size fraction" fly ash. Again, this has not been defined anywhere in the original disclosure and it is impossible for one of ordinary skill in the art to be enabled to make or practice applicants invention because this large size fraction is not defined. This large scale fraction is a critical part of their claimed invention and there is no Mixes from Tables 1 through 4 that contain a "small size fraction" fly ash without a large size fraction. It is impossible to determine make or practice applicants' invention because all examples contain the large size fraction which is undefined and vague and critical to the instant invention.

It is also therefore understood that there is no written literal support for what applicants are claiming in claim 15 as a result of the statements above and the applicants claimed invention also fails a proper written description requirement to make or practice their invention. It is the examiner's position that the disclosure would appear to be fatally defective because of the large size fraction is never defined in the disclosure and is critical to making or practicing the applicants' invention. The problem

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is that this particle size range as to what applicants mean by large scale fraction is not understood and vague.

Provisional Obviousness-Type Double Patenting

Claims 15-17 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over all claims of copending Application No. 10/090,362 and 10/090,338. Although the conflicting claims are not identical, they are not patentably distinct from each other because both would appear to claim the same composition in overlapping amounts.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Obviousness Type Double Patenting:

Claims 15-17 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 35-72 of U.S. Patent No. 6,506,248 B1, claims 34-64 and 66-71 of US Patent No. 6,346,146 B1, and claims 1-18 of US Patent No. 6,030,447. Although the conflicting claims are not identical, they are not patentably distinct from each other because both would appear to claim the same composition in overlapping amounts.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA

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1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

35 USC 102/103:

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15-17 are rejected under 35 U.S.C. 102(a and b) as anticipated by
or, in the alternative, under 35 U.S.C. 103(a) as obvious over .Heathman et al. '012,
Dubey '658 B1, Dattel '561 B1, Brothers et al. '921 B1, '069, or '053, Nishioka et al.
'366, Parecevaux et al. '160, Blomberg et al. '031, Funston et al. '672, Turpin Jr '220,
Hofmann '564 B2, Angelskar et al. '630, Burge et al. '510, Sutor '301, Burge et al.

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'154, Simeonov et al. '773, Styron '632, Liskowitz et al. '475, Francis et al. '518, Smetana et al. '255, Minnick '134 or '408, Kirkpatrick et al. '283 or '889, Onan et al. '521, Brothers et al. '921 B1, Brook et al. '458 or '310, *JP 57017452*, *JP 58149939*, *JP 63248751 (Uchida et al.)*, *SU 1571024 (Samchenko et al.)*, *JP 04089340 (Sakota et al.)*, *IT 1311962 (Masini)*, *JP 55130847*, *DD 143936 (Kambor et al.)*, *FR 2512440 (Baryla)*, *CN 1178202 (Wan)*, *CN 1251358 (Tang)*, *JP 2001316157 (Takizawa et al.)*, *JP 2002053361 (Uehara et al.)*, *RU 2157796 (Khrulev et al.)*, *RU 2161695 (Logvienko et al.)*, or *RU 2168485 (Belov et al.)*.

Note : Italicized references are one page abstracts only.

All of the above cited references teach a composition comprising a hydraulic binder (e.g. cement, gypsum), water, and either fly ash or an aluminous material such as hydrated alumina (also known as aluminum hydroxide, alumina trihydrate, aluminum trihydrate, etc.) in amounts that overlap the instantly claimed invention to obtain a water reduction of 20 to 40%. (See prior art claims and abstract for italicized references). It is also noted that the amounts that overlap are within the broad ranges of amounts for components that would result in this 20 to 40% water reduction. That is, 30 to 100% fly ash based on cement weight, 5-30 wt% aluminous material (e.g. hydrated alumina) based on weight of cement, 10 to 50 weight percent cement, and 5 to 30 wt% filler (See pages 4-5 of applicants' specification). The prior art teaches amounts that fall or overlap applicants ranges in their disclosure and thus would have been expected to also lead to a reduction of water of 20 to 40%.

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It is also noted that applicants do not have support for fly ash for small scale size of predominant size of up to about 10 microns in their claims and the omission of a water reducer. Nevertheless, it is the examiner's position that the particle size range still overlaps the instantly claimed invention.

It is also noted that the applicants particle size of aluminous material reads upon a liquid solution since "up to includes zero as a lower limit" and the powder can be in solution. Further, the particle size range is sufficiently large to meet the prior art particle size ranges. Finally, the addition of a plasticizer to a cement slurry would have been an obvious design choice for one of ordinary skill in the art because it is a conventional additive added to cement mixtures.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Marcantoni whose telephone number is 571-272-1373. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell, can be reached at 571-272-1362. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Paul Marcantoni
Primary Examiner
Art Unit 1755